

U.S. Application Serial No. 10/749,819

IN THE CLAIMS:

Please amend claims 1, 11 and 12, and cancel claims 7 and 15, as follows:

1. (currently amended) A method of maintaining registration information for a plurality of different communication areas within a network comprising:

registering in a first communication area, where the wireless communication unit is located;  
moving into a second communication area, which is different than the first communication area;

registering in the second communication area, while retaining at least the most recent prior registration associated with a previous communication area, wherein the default operating mode includes retaining at least the two most recent area registrations; and

wherein, upon entering a new communication area, determining if the new area is associated with a different paging group from the paging group associated with the immediately prior communication area, and if the new area is associated with a different paging group, registering in the new communication area regardless as to whether a registration from a prior presence in the new communication area is still retained.

2. (original) A method in accordance with claim 1 wherein each communication area is associated with a different packet zone identification.

3. (original) A method in accordance with claim 1 further comprising moving back into the first communication area, without registering in the first communication area, when the registration from the user's prior presence in the first communication area is still retained.

4. (original) A method in accordance with claim 1 further comprising moving into a third communication area and registering in the third communication area, which is different from the first and the second communication areas, while retaining the registration from at least the previous area within which the user was most recently located.

5. (original) A method in accordance with claim 4 further comprising discarding any registrations not

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associated with the present communication area and the most recent previous communication area.

6. (original) A method in accordance with claim 4 further comprising discarding the registration associated with the least recent previous communication area.

7. (canceled)

8. (original) A method in accordance with claim 1 wherein a registration supports a packet data communication in the associated communication area.

9. (original) A method in accordance with claim 1 wherein retaining a registration associated with a previous communication area occurs automatically in absence of specific instructions.

10. (original) A method in accordance with claim 9 wherein retaining a registration associated with a previous communication area occurs automatically in absence of a service option control message, which overrides a default value associated with the number of registrations to retain.

11. (currently amended) A method ~~in accordance with claim 1 further comprising~~, of maintaining registration information for a plurality of different communication areas within a network comprising:

registering in a first communication area, where the wireless communication unit is located;  
moving into a second communication area, which is different than the first communication

area;

registering in the second communication area, while retaining at least the most recent prior registration associated with a previous communication area, wherein the default operating mode includes retaining at least the two most recent area registrations; and

wherein, upon changing power states including powering up and powering down, discarding any previously stored registrations are discarded.

12. (currently amended) A wireless communication device comprising:

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a transceiver adapted for communicating with a network;

a processor coupled to the transceiver, the processor including

an area detection module adapted for detecting the area in which the wireless communication device is located, said area detection module including a new paging group area detect module adapted for detecting the wireless communication device entering a new paging group area, wherein if the wireless communication device enters an area associated with a new paging group, then producing a control signal adapted for initiating a registration by the registration module regardless as to whether registration information from a prior presence in the new area is still retained, and

a registration module adapted for registering the wireless communication device with the network; and

a storage element coupled to the processor and adapted for retaining registration information for a plurality of areas in a default mode of operation.

13. (original) A wireless communication device in accordance with claim 12 wherein said processor further includes a registration discard module adapted for discarding registrations associated with areas in which the wireless communication device was least recently located, when the number of registrations exceeds the number of registrations being retained.

14. (original) A wireless communication device in accordance with claim 12 wherein said processor further includes a comparison module adapted for comparing the area in which the wireless communication device is located with the area associated with the registration information retained within the storage element, wherein if a registration associated with the current location of the wireless communication device is not retained in the storage element, then producing a control signal adapted for initiating a registration by the registration module.

15. (canceled)

16. (original) A wireless communication device in accordance with claim 12 wherein one or more of the modules of said processor includes one or more sets of prestored instructions.

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17. (original) A wireless communication device in accordance with claim 16 wherein at least some of the one or more sets of prestored instructions are retained in the storage element.

18. (original) A wireless communication device in accordance with claim 12 wherein the processor further includes a packet data connection module adapted for establishing a packet data connection with the network.

19. (original) A wireless communication device in accordance with claim 18 wherein the packet data connection module includes a packet data voice module adapted for supporting voice communication via a packet data connection.

20. (original) A wireless communication device in accordance with claim 18 wherein the packet data connection is part of at least one of a spread spectrum communication system and a code division multiple access (CDMA) system.

21. (original) A wireless communication device in accordance with claim 12 wherein the wireless communication device is a cellular telephone.